



Full Length Research Article

A STUDY ABOUT PERSONAL LEARNING ENVIRONMENT BUILDING BASED ON CMOOC CONCEPT

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ARTICLE INFO

Article History:

Received 19th December, 2014
Received in revised form
27th January, 2015
Accepted 03rd February, 2015
Published online 31st March, 2015

Key words:

MOOC,
CMOOC,
Connectionist theory,
Personal learning environment.

ABSTRACT

Under the background of education globalization and information technology, open education resources based on the concept of "open sharing" is the important trend of global education movement. MOOC is the new development of open education resources and breakthrough, that it embodies the transformation about the open education resources from the simple resources to curriculum and teaching, and this shift will inevitably impact on learner. By researching on the implication and the development of the MOOC, it thinks that CMOOC based on connectionist theory produce important influence on the personal learning environment building. Learning under open education is based on knowledge as the center, carried out connection, the process of restructuring and reengineering in a planned way. Based on that, this paper constructs the basic structure of the personal learning environment, and designs the function structure.

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INTRODUCTION

Under the background of education globalization and information technology, open education resources based on the concept of "open sharing" is the important trend of global education movement. Especially with development of cloud computing and social networking media, that provides a new information technology of the environment and support, the new concept of open education resources and practice mode progress and evolves. In 2008, MOOC become a new and popular curriculum mode in open education. MOOC is the abbreviation of Massive Open Online Course. MOOC is the new development and breakthrough of open education resources, and it embodies the open education resources transformation from the simple resources to curriculum and teaching. MOOC is considered to be one of the important events in the field of education in 2012, to promote the development of the global new open education movement and the new development will inevitably important influence on knowledge learning style. As proven to be effective, Informal learning is how to cope with the new development of open education movement?

Based on the personal learning environment platform as the research object, the paper analyzes the construction of a PLE and discussed.

CMOOC overview

The meaning and development of MOOC

MOOC is a new curriculum mode in open education field in recent years, with some characteristics, such as the openness, large-scale, self-organization and social. Ken and Masters's explanation to MOOC concept is as follows: Mass is mainly refers to a large number of learners to participate in the courses, and in the case of large-scale course range (Masters, Ken, 2011). Open is that learners may come from all over the world. And information sources, the evaluation process, the learners use learning environment is open. MOOC is not only the aggregation of learning content and learners, but also a way to connect teachers and learners by a field with common topic discuss. MOOC integrate all kinds of resources together from social network, experts in the field and online available resources. Course is generated in the communication of the participants through various forms of social media (McCauley et al., 2010). With the development of open education movement, the MOOC also gradually divided into two forms: CMOOC patterns based on connectionist theory and XMOOC

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mode based on behaviorism learning theory. CMOOC emphasis on self-study, mutual aid and fit in with the generative knowledge learning, rather than some fixed content knowledge learning. CMOOC needs the efforts of both teachers and students to establish the relevance of learning content. It is helpful to the cultivation of autonomous learners, closer to the informal learning and problem solving. XMOOC is a new form of MOOC development. Teaching contents is the micro-content and feedback, and homework and discussion constitutes is the main form of teaching and learning (Wang Ping, 2013). XMOOC just like traditional classroom in the projection of the Internet, and the teaching mode is more clear and easy to copy.

The operation mode of CMOOC

CMOOC is based on connectionist theory, and the learning process based on connectionist theory mainly includes social unicom, information aggregation, content generation and group collaboration. The curriculum design based on connectionist theory makes the MOOC courses and traditional courses have bigger difference. In traditional courses, the teacher provides the resources and activities at the center of learning and interaction. They limited the border of intellectual inquiry, and learn contents and how to learn are planned in advance. In the MOOC courses, resources provided by teachers become the starting point of intellectual inquiry, learners have become the center of learning and interaction, and the content of the learners to provide expand and enlarge the boundaries of knowledge. Therefore, learning is to be on the traversal and construction of network information, through the different cognitive interaction to form a new knowledge community (Li Qing and Wang Tao, 2012). In curriculum operation, every MOOC course has a center platform that is managed and maintained by the course coordinator. Teacher release course information including course overview, content resources, weekly topic, event notification, teacher introduction, etc. And organize learning activities for the entire course on the platform. Learners can choose BBS, Weibo, personalized learning tools such as social networking sites. In CMOOC course, teachers release topics and activity, coordinate the learner's discussion, promote learning process. Learner browse, discuss, finish the homework through a variety of platforms and tools, and ultimately achieve the goal of learning. The running mode of CMOOC is as shown in the figure 1 below.

The construction of the personal learning environment based on CMOOC

Personal learning environment refers to a kind of tool combination that can use web2.0 tools to create groups and share content (Tian Fu Peng and Tian Fei Yu, 2014). In simple terms, the role of the individual learning environment is to support learners create content, share content, organization content and support the communication between learners. Based on the concept of CMOOC learning environment, learners can set learning goals, manage their own learning content, voluntary participate in learning activities. Establish personal learning environment is a learning process, and it is also a kind of learning results.

The basic structure

Unicom, restructuring and reengineering the ability is the characteristic of today's knowledge. The small fragments of knowledge make for reengineering in the context of different media and situation. And it is also used to establish a more personalized, more complex structures (Tian Fu Peng and Tian Fei Yu, 2014). Based on the concept of CMOOC believes that learning under open education is based on knowledge as the center, carried out in a planned way connection, restructuring and reengineering. From the point of time and space dimensions, personal learning environment includes some elements, such as learning community, learning resources and learning situation, support tools and schedule. They promote each other between each other; influence each other, constantly to support the study. The following is shown in figure 2:

Function structure design

The main features of personal learning environment based on the concept of CMOOC include: PLE portal, My Course, My Activity, My Group. Specific as shown in the figure below:

“PLE Portal” is the user interface of personal learning environment, and it is the exhibition space of learning environment information, activities. Mainly includes the information announcement, the number of online learning, time, course gate number, new reports, etc. Course exhibition columnmainly includes the list of all courses according to certain classification standards organization and recommended

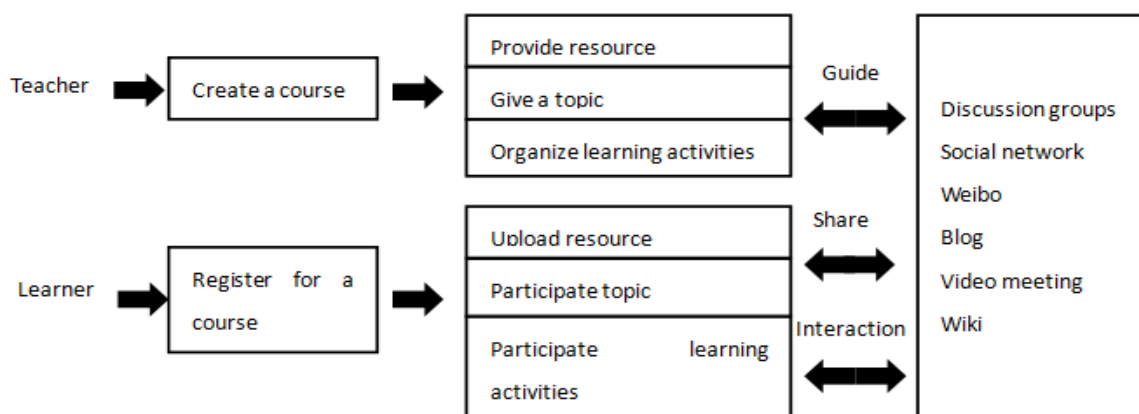


Fig.1. The operation mode of CMOOC

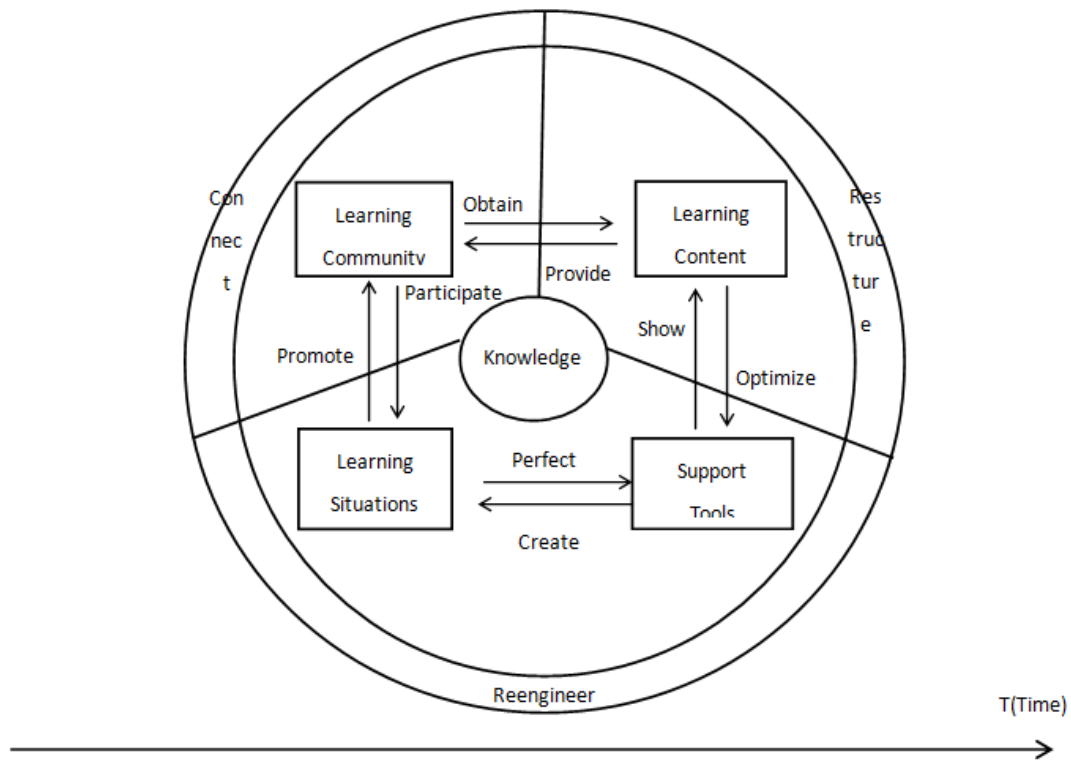


Fig.2. The basic structure of PLE based on the concept of CMOOC

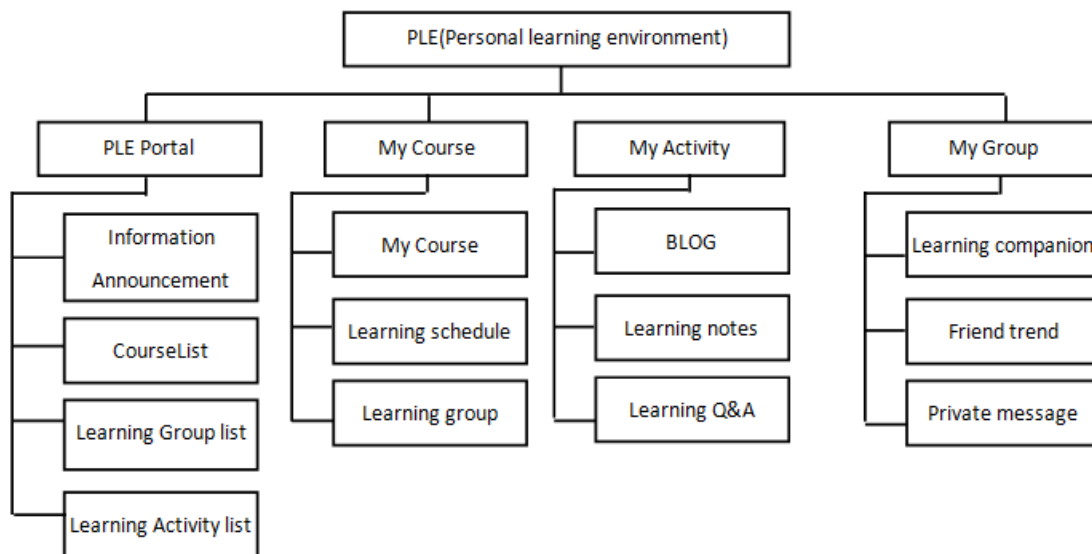


Fig.3. Function structure design of PLE based on the concept of CMOOC

lesson shows high attention. Study group exhibition lists learning active group. The Activity show refers to discussion and study notes, recommended log show (Simons, 2009). “My Course” is the main performance to achieve personal learning information restructuring. It manages curriculum through learning course, the collection and focus on curriculum. Learning courses should be relatively study schedule and learning team, and detailed study plan and study group activity. The system will automatically push the dynamic change of the course about focus on curriculum. “My Activity” helps to achieve learning content engineering, including internalization reengineering and consultation Consultation reengineering realizes by learning question and

answer. Learners can release of learn doubt, and also answer questions from other learners to release. “My Group” helps to keep up the learning social relations. It refers to taking learning as the bond formation to form the community and friends Group. Mainly implements learning companion's basic information management, dynamic push, intimate interaction, etc.

Summarize

In an age of great development in education, we should not only focus on the development of formal teaching, also will be thinking about what to learn, how to learn in self-interest

driven. CMOOC based on connectionist theory provides revelation for the construction of a personal learning environment that it not only reflected in the curriculum and the resources of the organization, but take knowledge as the core, carried out in a planned way joins, restructuring and reengineering process of learning. It embodies the self-organization learning and social, and the consciousness and ability is more important than gain specific knowledge.

REFERENCES

- Li Qing and Wang Tao, 2012. MOOC: A giant open course mode based on connected doctrine. *Modern Distance Education Research*, (3):67-71.
- Masters, Ken, 2011. A Brief Guide To Understanding MOOCs(J), *The Internet Journal of Medical Education*, Vol 1, Number 2.
- McCauley, A., Stewart, B., Siemens, G. and Cormier, D. 2010. "The MOOC model for digital practice", University of Prince Edward Island, Social Sciences and Humanities Research Council's Knowledge synthesis grants on the Digital Economy./edblog/wpcontent/uploads/MOOC_Final.pdf.
- Simons, 2009. Network era of knowledge and learning—tend to connection (M). East China Normal University Press, Shang Hai.
- Tian Fu Peng and Tian Fei Yu, 2014. Personal learning environment study review based on of connected doctrine, *E-education Research*, (7):72-78.
- Wang Ping, 2013. The new development and application of massive open online course: From CMOOC to XMOOC. *Modern Distance Education Research*, (3):49-52.
